

PATENT  
5589-02305DECLARATION

As a below named inventor, I hereby declare that:

My residence, post office and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or the below named inventors believe they are the original, first and joint inventors (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **METHODS AND SYSTEMS FOR DETERMINING A CRITICAL DIMENSION, A PRESENCE OF DEFECTS, AND A THIN FILM CHARACTERISTIC OF A SPECIMEN**, the specification of which:

\_\_\_\_\_ is attached hereto.

X was filed on September 20, 2001 as Application Serial No. 09/957,468.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability of the subject matter claimed in this application, as "materiality" is defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

PRIOR FOREIGN APPLICATION(S)	Priority <u>Claimed</u>
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<u>N/A</u> (Number)	<u>Yes/No</u>
(Country)	(Date Filed)

<u>N/A</u> (Number)	<u>Yes/No</u>
(Country)	(Date Filed)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose all information known to me to be material to the patentability of the subject matter claimed in this application, as "materiality" is defined in Title 37, Code of Federal Regulations, § 1.56, which become available between the filing date of the prior application and the national or PCT international filing date of this application:

<u>N/A</u> (Application Serial No.)	<u>(Filing Date)</u>	<u>(Status)</u>
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<u>N/A</u> (Application Serial No.)	<u>(Filing Date)</u>	<u>(Status)</u>
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PATENT  
5589-02305

I hereby claim the benefit under title 35, United States code §119(c) of any United States provisional application(s) listed below:

60/234,323 **September 20, 2000**  
(Application Serial No.) **(Filing Date)**

---

(Application Serial No.) (Filing Date)

Please direct all communications as follows:

Ann Marie Mewherter  
CONLEY, ROSE & TAYON, P.C.  
P.O. Box 398  
Austin, Texas 78767-0398  
Ph: (512) 476-1400

I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**Inventor's Full Name:** Mehrdad Nikoonahad

**Inventor's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**City and State (or Foreign Country) of Residence:** Menlo Park, CA **Citizenship:**

Post Office and Residence Address: 271 Oakhurst Place, Menlo Park, CA 94025  
(Include number, street name, city, state and zip code)

**Inventor's Full Name:** Ady Levy

**Inventor's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**City and State (or Foreign Country) of Residence:** Sunnyvale, CA **Citizenship:** Israel

Post Office and Residence Address: 1632 Swallow Drive, Sunnyvale, CA 94087  
(Include number, street name, city, state and zip code)

PATENT  
5589-02305Inventor's Full Name: Kyle A. BrownInventor's Signature: Kyle A. Brown Date: 2/7/2002City and State (or Foreign Country) of Residence: Irvine, CA Citizenship: U.S.A.Post Office and Residence Address: 149 Stonecliff Aisle, Irvine, CA 92612  
(Include number, street name, city, state and zip code)Inventor's Full Name: Gary Bultman

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

City and State (or Foreign Country) of Residence: Los Altos, CA Citizenship: \_\_\_\_\_Post Office and Residence Address: 10274 Kcnbar Rd., Los Altos, CA 94024  
(Include number, street name, city, state and zip code)Inventor's Full Name: Dan Wack

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

City and State (or Foreign Country) of Residence: Los Altos, CA Citizenship: \_\_\_\_\_Post Office and Residence Address: 930 Lundy Lane, Los Altos, CA 94024  
(Include number, street name, city, state and zip code)Inventor's Full Name: John Fielden

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

City and State (or Foreign Country) of Residence: \_\_\_\_\_ Citizenship: \_\_\_\_\_

Post Office and Residence Address: \_\_\_\_\_  
(Include number, street name, city, state and zip code)



PATENT  
5589-02305

I hereby claim the benefit under title 35, United States code §119(e) of any United States provisional application(s) listed below:

60/234,323 September 20, 2000  
(Application Serial No.) (Filing Date)

---

(Application Serial No.) (Filing Date)

Please direct all communications as follows:

Ann Marie McWherter  
CONLEY, ROSE & TAYON, P.C.  
P.O. Box 398  
Austin, Texas 78767-0398  
Ph: (512) 476-1400

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I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**Inventor's Full Name:** Mehrdad Nikoonahad

Inventor's Signature: Mark W. McDaniel Date: 2/19/2007

**City and State (or Foreign Country) of Residence:** Menlo Park, CA **Citizenship:** USA

Post Office and Residence Address: 271 Oakhurst Place, Menlo Park, CA 94025  
(Include number, street name, city, state and zip code)

Inventor's Full Name: **Adv Levy**

Inventor's Signature:  Date: 2/13/02

**City and State (or Foreign Country) of Residence:** Sunnyvale, CA **Citizenship:** Israel

Post Office and Residence Address: 1632 Swallow Drive, Sunnyvale, CA 94087  
(Include number, street name, city, state and zip code)

PATENT  
5589-02305Inventor's Full Name: Kyle A. Brown

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

City and State (or Foreign Country) of Residence: Sunnyvale, CA Citizenship: U.S.A.Post Office and Residence Address: 655 S. Fair Oaks, Apt. K117, Sunnyvale, CA 94086  
(Include number, street name, city, state and zip code)Inventor's Full Name: Gary BultmanInventor's Signature: Gary Bultman Date: Feb 13, '02City and State (or Foreign Country) of Residence: Los Altos, CA Citizenship: USAPost Office and Residence Address: 10274 Kenbar Rd., Los Altos, CA 94024  
(Include number, street name, city, state and zip code)Inventor's Full Name: Dan WackInventor's Signature: Dan Wack Date: 2/13/02City and State (or Foreign Country) of Residence: Los Altos, CA Citizenship: USAPost Office and Residence Address: 930 Lundy Lane, Los Altos, CA 94024  
(Include number, street name, city, state and zip code)Inventor's Full Name: John FieldenInventor's Signature: John Fielden Date: Jan 30, 2002City and State (or Foreign Country) of Residence: Los Altos, CA Citizenship: USAPost Office and Residence Address: 2020 Victoria Ct., Los Altos, CA 94024  
(Include number, street name, city, state and zip code)

FORM I PTO-1595  
1-31-92RECORDATION FORM COVER SHEET  
PATENTS ONLYU.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Atty. Dkt. No. 5589 02305

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Mehrdad Nikoonahad  
 Ady Levy  
 Kyle A. Brown  
 Gary Bultman  
 Dan Wack  
 John Fielden

Additional name(s) of conveying party(ies) attached?  Yes  No

## 3. Nature of Conveyance:

Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

Execution Date: February 19, 2002

## 2. Name and address of receiving party(ies):

Name: KLA-Tencor, Inc.

Internal Address: \_\_\_\_\_

Street Address: 160 Rio Robles

City: San Jose State: CA ZIP 95134

Additional name(s) & address(es) attached?  Yes  No

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## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of this application is:

A. Patent Application No.(s) 09/957,468 filed 9/20/2001

B. Patent No.(s)

Additional numbers attached?  Yes  No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Ann Marie Mewherter

Internal Address: Conley, Rose &amp; Tayon, P.C.

Street Address: P.O. Box 398

City: Austin State: TX ZIP: 78767-0398

## 6. Total number of applications and patents involved: one (1)

7. Total fee (37 CFR 3.41): \$ 40.00

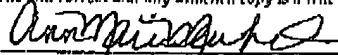
 Enclosed Authorized to be charged to deposit account8. Deposit account number: 50-1505/5589-02305  
(Attach a duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

## 9. Statement and Signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Ann Marie Mewherter

Name of Person Signing  
Reg. No. 1-50,484

Signature

February 20, 2002

Date

Total number of pages comprising cover sheet: 7

OMB No. 0651-011 (exp. 4/94)

SN 09/957,468  
Page 4 of 18

PATENT  
5589-02305ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, does hereby:

SELL, ASSIGN AND TRANSFER to KLA-TENCOR, INC. (the "Assignee"), having a place of business at 160 Rio Robles, San Jose, California 95134-1809 the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 09/957,468 filed on September 20, 2001, and is entitled "**METHODS AND SYSTEMS FOR DETERMINING A CRITICAL DIMENSION, A PRESENCE OF DEFECTS, AND A THIN FILM CHARACTERISTIC OF A SPECIMEN**," such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

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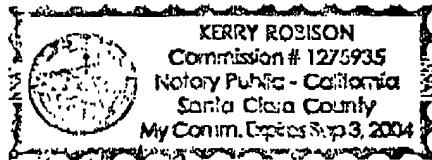
FEB 21 2002

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PATENT  
5589-02305(Signature) Mehrdad Nikoonahad  
Mehrdad NikoonahadDate: 2/13/2002

BEFORE ME, the undersigned authority, on this 19<sup>th</sup> day of February, 2001, personally appeared Mehrdad Nikoonahad, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]


Kerry Robison  
 Notary or Consular Officer

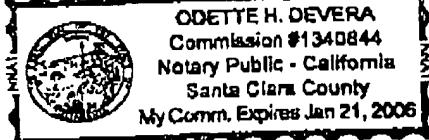
(Signature)

Ady Levy

Date: 2/13/02

BEFORE ME, the undersigned authority, on this 13<sup>th</sup> day of February, 2001, personally appeared Ady Levy, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]


Odette H. Devera  
 Notary or Consular Officer

(Signature)

Kyle A. Brown

Date: \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2001, personally appeared Kyle A. Brown, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Notary or Consular Officer

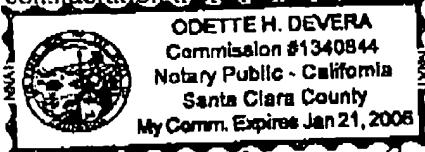
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PATENT  
5589-02305(Signature) Mary Bultman  
Gary BultmanDate: Feb 13, 02

BEFORE ME, the undersigned authority, on this 13<sup>th</sup> day of February, 2001,<sup>2</sup> personally appeared Gary Bultman, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Odette H. devera

Notary or Consular Officer

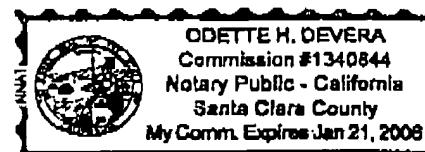
(Signature)

Dan WackDate: 2/13/02

Dan Wack

BEFORE ME, the undersigned authority, on this 13<sup>th</sup> day of February, 2001,<sup>2</sup> personally appeared Dan Wack, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Odette H. devera

Notary or Consular Officer

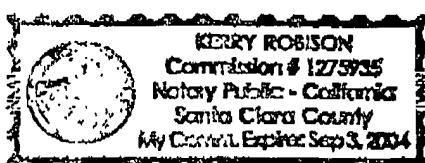
(Signature)

John FieldenDate: Jan 30, 2002

John Fielden

BEFORE ME, the undersigned authority, on this 30<sup>th</sup> day of January, 2001,<sup>2</sup> personally appeared John Fielden, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Kerry Robison

Notary or Consular Officer

ANN MARIE MEWHERTER  
CONLEY, ROSE & TAYON, P.C.  
P.O. BOX 398  
AUSTIN, TX 78767-0398

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PATENT  
5589-02305ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, does hereby:

SELL, ASSIGN AND TRANSFER to KLA-TENCOR, INC. (the "Assignee"), having a place of business at 160 Rio Robles, San Jose, California 95134-1809 the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, Serial No. 09/957,468 filed on September 20, 2001, and is entitled "**METHODS AND SYSTEMS FOR DETERMINING A CRITICAL DIMENSION, A PRESENCE OF DEFECTS, AND A THIN FILM CHARACTERISTIC OF A SPECIMEN**," such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

PATENT  
5589-02305(Signature) \_\_\_\_\_  
Mehrdad Nikoonahad

Date: \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2001, personally appeared Mehrdad Nikoonahad, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Notary or Consular Officer

(Signature) \_\_\_\_\_  
Ady Levy

Date: \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2001, personally appeared Ady Levy, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

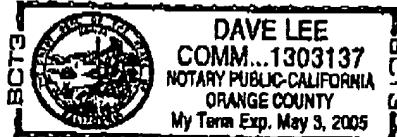
[SEAL]

Notary or Consular Officer

(Signature) Kyle A. Brown  
Kyle A. BrownDate: 2/2/2002

BEFORE ME, the undersigned authority, on this 2 day of FEBRUARY, 2002, personally appeared Kyle A. Brown, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

  
 Notary or Consular Officer


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Page 2 of 3

SN 09/957468  
Page 9 of 18

PATENT  
5589-02305(Signature) \_\_\_\_\_  
Gary Bultman

Date: \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2001, personally appeared Gary Bultman, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Notary or Consular Officer

(Signature) \_\_\_\_\_  
Dan Wack

Date: \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2001, personally appeared Dan Wack, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Notary or Consular Officer

(Signature) \_\_\_\_\_  
John Fielden

Date: \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2001, personally appeared John Fielden, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledge to me that he executed the same of his own free will for the purposes and consideration therein expressed.

[SEAL]

Notary or Consular Officer

ANN MARIE MEWHERTER  
CONLEY, ROSE & TAYON, P.C.  
P.O. BOX 398  
AUSTIN, TX 78767-0398